NUCLEAR SOUTH ASIA

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Strategy

by

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

NUCLEAR SOUTH ASIA, by Major Gulraiz Afzal Khan, 65 pages.

This study investigates the military stability of South Asia, after overt display of nuclear explosions by Pakistan and India in May 1998. The two countries have been loggerhead on Kashmir dispute since their inception in 1948. Both have fought three major wars and are in the process of fighting a limited war in the Himalayan Mountains for the last seventeen years.

The specific emphasis was on the analyses of the genesis of problem and the roots of mistrust between the two countries. The present day military scenario and relationship of both countries have been discussed with special emphasis on the military government in Pakistan and hard-line religious government in India. The recent Kargil crisis in 1999, soon after nuclearization of both countries was also discussed during the course of study.

The study explained the problem areas, arms race and nuclear thresholds of two countries. It also briefly touched upon the reasons for nonadherence of nonproliferation treaties in vogue by the two countries. The study also includes the overall geopolitical environments of South Asia including the China factor in the region.

The study advocates that the world, in general, and South Asia, in particular, will remain under the clouds of nuclear holocaust due to Pakistan and India, unless Kashmir problem is amicably solved. In this regard the importance of intervention by world powers especially United States is extremely important. Both Pakistan and India have failed to resolve their core issue of Kashmir by bilateral talks so far; thu, third party intervention is extremely essential. If world powers fail to do so, it is a matter of time only when both countries will once again indulge in another full-scale war, which may have a potential to turn into a nuclear war.

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TABLE OF CONTENTS

ACRONYMS

CBMs	Confidence-Building Measures
C4I	Command, Control, Communications, Computers, and Intelligence
CTBT	Comprehensive Test Ban Treaty
FMCT	Fiscile Material Cut-Off Treaty
IAEA	International Atomic Energy Agency
LIC	Low Intensity Conflict
MAD	Mutually Assured Destruction
MTCR	Missile Technology Control Regime
NATO	North Atlantic Treaty Organization
NNWS	Non-Nuclear Weapon States
NPT	Non-Proliferation Treaty
NWS	Nuclear Weapon States
PLA	Peoples Liberation Army
SAARC	South Asian Association for Regional Cooperation
WMD	Weapons of Mass Destruction

CHAPTER 1

INTRODUCTION

Statement of the Problem

This research analyzes the impact of the nuclearization of Pakistan and India on military and diplomatic stability of South Asia over the next five years or so.

Background

The insatiable thirst of human beings to prevail over others militarily has led to an evolution in the weapons required for this purpose. The use of gunpowder in warfare gave a quantum jump to the destructive power available to man. However, the advent of nuclear bombs in 1945, brought about a true, modern revolution in warfare, which could not be comprehended fully by the military strategists of the day. These bombs were at first thought to be an extension of the existing firepower, but their immense destructive power soon forced military thinkers to carry out a reappraisal.

Bernard Brodie was perhaps the first strategist to fully recognize the implication of the atomic bomb. Brodie stated that the bomb had introduced a novel form of warfare, as against the common feeling that this was just another weapon with greater destructive power.[1] Brodie recognized the futility of defending civilian populations against this weapon. He also realized that the unique destructiveness of the bomb made it a fully decisive weapon in warfare and conventional military superiority could no longer guarantee security. His famous statement was, “Thus far the chief purpose of our military establishment has been to win wars, from now on, its chief purpose must be to avert them.”[2] Brodie observed that the bomb had radically changed the cost benefit

analysis of warfare familiar to Clausewitz and his disciples. No longer could a state expect to benefit from a war once its enemies were also in possession of the absolute weapon and were able to use it in retaliation against the attacker.

South Asia remains a hotbed of deep-rooted mistrust and hostility, mainly due to the unresolved issue of Kashmir. The region experienced a paradigm shift in the strategic environment in May 1998, when India and Pakistan clearly demonstrated their nuclear capabilities. South Asia faces numerous challenges, including a backlog of mutual distrust, suspicion and hatred.[3] The two nuclearized states have fought three wars besides the recent one at Kargil (Kashmir) and are in the middle of a long drawn out low intensity conflict, which may spin out of control and lead to a nuclear catastrophe in South Asia. The economic situation of both countries precludes large-scale production of weapons and delivery systems.[4] India is slightly better off than Pakistan, potentially leading to a weapons' asymmetry. This will greatly influence the formulation of deterrence strategy.

Pakistan and India share a 3,325-kilometer common border with critical targets lying in close proximity of each other. Pakistan's lack of strategic depth and the easterly location of its major population centers, as well as industry, compound the problem and increase its vulnerability. India, on the other hand, enjoys sufficient strategic depth with widely dispersed population centers and crucial industries.[5] The borrowed technological base and research in both countries is too weak to offer innovations and breakthroughs. This makes their capabilities well known and predictable. Elements of technological lead and advantage weigh in favor of India. They have reached the stage of thermonuclear or boosted fission capability (Pakistan is still to demonstrate) and have a lead in satellite technology, which gives them a base for developing an effective command, control,

communications, and computers system, to include early warning, command and control, and others.[6]

India's nuclear tests on 11 and 13 May 1998 caught the world unaware. While there were many reasons for dismay, there was little cause for surprise. The possibility that India would officially declare that it possessed nuclear weapons and would test them had existed at least since 1974, when the country carried out its first nuclear test.[7] India's policy of ambiguity, of keeping its options open, was born even earlier, with New Delhi's decision in the late 1960s not to accede to the Nuclear Non-Proliferation Treaty (NPT). An argument in favor of overt nuclear status had in particular increased since 1995, as pressure grew to conclude a treaty, make nuclear-capable missiles, and then sign the Comprehensive Test Ban Treaty (CTBT).

Pakistan had adopted a similar policy of ambiguity at around the same time as India. Unofficial statements touting the country's nuclear capabilities had been made by successive governments. Once out of office, former prime ministers had dropped strong hints that Islamabad possessed nuclear weapons. However, these were always formally denied by the government in power. Both India and Pakistan were, nonetheless, widely believed either to have nuclear weapons or to be able to produce them quickly. Crises in 1987 and 1990 sorely tried the policy of ambiguity in both India and Pakistan, and in 1995 India came close to declaring nuclear weapon status. New Delhi's policy, however, did not change at that time and Islamabad was not ready to do it alone.[8]

South Asia has indeed been exceptionally troubled in the past half century. Conflict between India and Pakistan followed their bloody partition in 1947 and broke out again in 1965 and 1971. India and China went to war in 1962. From 1987 to 1990,

Indian forces got embroiled in the long-running hostilities in Sri-Lanka.[9] Both India and Pakistan came close to full-scale wars in 1987, 1990, and 1999. Leaders in New Delhi have always tried to claim that China is their equal rival, a notion which is not accepted by most of the other countries in world, given the unequal military and economic status of the two countries. Despite India's continuous effort to drag China into the nuclear equation in South Asia, the geopolitical and geoeconomic realities will keep China out of the South Asian nuclear picture. As Pakistan provides the counterweight in the India-China equation, therefore, an indirect shadow will always remain on India due to the China factor. China's close ties with Pakistan have always been a great source of tension for the Indian leadership. The 1962 defeat had been a humiliation for India, and two years later China's nuclear tests caused great alarm in India. During the 1962 conflict, China officially declared its backing for Islamabad's claim for Kashmir. In a bid to resolve its differences with Beijing, New Delhi decided on a policy of engagement in the late 1980s. Indian Prime Minister Rjiv Gandhi visited China in December 1988, and Prime Minister Narsimha Rao visited China in 1993, when the two sides concluded an agreement on peace at the line of control. However, in the period before the tests, once again both sides became distant when Indian leadership showed its dissatisfaction on Beijing's response of sending junior-level military leadership to India on return visits. Statements by Indian Defense Minister Fernandes and a letter by Indian Prime Minister Vajpayee to US President Clinton, which was later published in *The New York Times*, alleging China provided support to Pakistan, was a further blow on the relationship of the two countries.

Pakistan's main focus in its relations with India has been Kashmir, the unfinished business of partition as per Pakistani leadership since 1947. Despite some Indian assertions that Islamabad's interests in the area has been intermittent and was revived in 1990s only for opportunistic reasons, the issue has, in fact, dominated Pakistan's foreign policy since 1947.[10] Islamabad has been concerned that, if Indian domination was left unchallenged, Pakistan's claim over Kashmir would be eroded. The dispute over Kashmir notwithstanding, the gravest difficulties facing Pakistan around the time of India's tests were domestic. Against the possible economic aid from other world states and the US, the strength of domestic opinion was overwhelming. The public in Pakistan took the provocative and triumphalist statements by Indian leadership as a direct threat to their existence. Pakistani intelligence reported a possible air strike by Indian and Israeli aircraft on the nuclear installations. The immediate international response to the Indian tests was not as tough or as punitive as Pakistan believed was warranted. Islamabad felt that Washington did not really feel the security concerns of Pakistan.

India and Pakistan now confront each other without a clear strategic solution to the Kashmir problem, confidence-building measures, or transparency about each other's nuclear arsenal. They hold a tremendous potential and capabilities for destruction, whether by design or through accidental, unauthorized, or unintended use of nuclear weapons.[11] Kashmir is only one possible flash point where this could happen.

Limitations

The study will essentially be limited to an evaluation of present-day geostrategic environments of South Asia, military and diplomatic stability, or vice versa due to nuclearization of Pakistan and India. It will also examine the threat the present regimes

in both countries pose to each other, especially in the context of Kashmir dispute and role of China as a key player in the region.

Delimitation

The study will not analyze the economic thresholds of both countries as the same warrants different research all together. The study will also avoid touching irrelevant questions regarding past conflicts between the two countries; however, mention of core issues will be made to develop the relationship to the present-day diplomatic situation.

Key Nuclear Terms

Some of the terms that shall help in providing an understanding of the subject are defined in the dictionary as follows.

Countervalue Targets. These are major population and communication centers and industrial complexes to which damage will severely affect the adversary's will and war sustenance.

Counterforce Targets. These are the enemy's major concentrations, nuclear installations, and others.

Critical Mass. The minimum mass of a fissionable material that will just maintain a fission chain reaction under precisely specified conditions, such as the nature of the material and its purity, the nature and thickness of the tamper (or neutron reflector), the density (or compression), and the physical shape (or geometry). For an explosion to occur, the system must be supercritical.

Deterrence. Deterrence prevents an enemy from making a decision to use armed forces. The results desired are, therefore, psychological ones and are sought by the

means of a threat. If used to prevent the enemy from initiating action against oneself, it is defensive deterrence. On the other hand, if used to prevent the enemy from resisting the action that one proposes to take, it is offensive deterrence.

First Use. It is a preemptive strike against any type of target. This can be launched even within one's own territory against enemy penetration.

First Strike Capability. This is the capability to launch a preemptive nuclear attack against known enemy nuclear assets.

Second Strike. This is the capability to withstand the first nuclear strike by the enemy and be able to retaliate against the enemy with nuclear weapons.

Strategic Nuclear Weapons. These include the nuclear weapons designed to be used on a strategic plane. These are weapons of the larger yield to destroy the enemy's strategic and countervalue targets at longer ranges. These include nuclear weapons launched by ballistic missiles from the surface, from submarines, and from long-range aircraft.

Subcritical Mass. It is the quantity of uranium that releases one to two neutrons, which results in implosion instead of explosion, as no chain reaction takes place. In this case, no energy is released, thus it cannot be detected and is not prohibited under the CTBT. The US has conducted a number of subcritical tests after signing the CTBT.

Tactical Nuclear Weapons. These are smaller yield nuclear weapons, which are used to destroy military targets in the field and, hence, imply a localized use. These can be fired through artillery guns and short-range ballistic missiles or delivered by aircraft.

Triad. A system in which nuclear forces are based on ground, air, and sea.

This chapter dwelled upon the genesis of conflict between Pakistan and India, the background of the nuclearization of both countries, and the key nuclear terms which will be used subsequently in the study. The next chapter will refer to the available material on the subject and will analyze the shortcomings in the printed material. The subject is an ongoing debate all over the world, especially under the present circumstances; however, the cutoff time for any research for this thesis will be 15 December 2001.

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[1]Bernard Brodie, *The Absolute Weapon* (New York: Oxford University Press**,** November 1946), 6.

[2]Ibid., 8.

[3]Zhou Bo, "South Asia: The Prospect of Nuclear Disarmament After 1998 Nuclear Tests in India and Pakistan" (Australia: Land Warfare Studies Center, Working Paper No.108, November 1999), 6.

[4]Ziba Moshavir, *Nuclear Weapons Proliferation in the Indian Subcontinent,* (New York: St. Martin's Press,1991), 19-20.

[5]Brig Mohammed Siddique**,** "Nuclear Strategy of Pakistan" (Paper, Pakistan Army, Rawalpindi, 2001), 9.

[6]Ibid., 12.

[7]Hilary Synnott, "The Causes and Consequences of South Asia's Nuclear Tests" (Paper, Oxford University Press for the International Institute for Strategic Studies, Oxford, 1999), 26.

[8]Ibid., 32.

[9]Ibid., 35.

[10]Rajesh Rajagopalan, "Prospects for Peace in South Asia," *The Hindu*, 26 April 1999, 10

[11]Praful Bidwai, "India-Pakistan Hold Reins to World's Nuclear Future," *The Daily Star,* 1 January 1999, 13

CHAPTER 2

LITERATURE REVIEW

The nuclear programs of Pakistan and India have been under world scrutiny for a long time. Long before the two countries displayed their nuclear might, analysts were writing about the possibility of nuclear war in South Asia. Pakistan was subjected to the Pressler Amendment, under which the sale of all military hardware was banned to Pakistan for pursuing covert nuclear activities. In this regard China is always accused of helping out Pakistan in the enrichment of uranium and the transfer of nuclear technology. There have been long drawn out analyses during the 1980s and 1990s regarding the nuclear capabilities of both countries and their impact on already volatile South Asia. This chapter presents a review of published literature, which covers the following aspects:

1. Background of tensions between the two countries
2. Nuclear developments by Pakistan and India over time
3. Impact of nuclear Pakistan and India on the stability of the region
4. Kashmir, a flash point and potential threshold invoking nuclear conflict

The first Pakistan-India war broke out in October 1947, just two months after their liberation from the British rule. The conflict was over the jurisdiction of the State of Jammu and Kashmir. Kashmir was a border state with a Muslim majority, ruled by a Hindu Maharaja. By virtue of its Muslim population the state should have joined Pakistan, but the Maharaja was able to sign a standstill agreement with the Indian government and Kashmir stayed within the boundaries of India. Kashmir quickly gained particular importance to both Pakistan and India. Less than two months after

independence Kashmiri peasants rose in rebellion against their Hindu landlords. India responded by sending troops to help the Maharaja. This resulted in the dispatch of troops by Pakistan to help the freedom fighters. The war between two sides raged for months before a de facto borderline was established with one-third of Kashmir on Pakistan's side and two-third still remaining with India.

On Pakistan's request the UN passed a resolution to conduct a plebiscite in Kashmir in order to decide its future. India demanded the withdrawal of Pakistani troops from Kashmir before implementing the UN resolution. Pakistan rejected the Indian demand, arguing that without any concrete steps they would not leave Kashmir at the mercy of Indian soldiers.[1] Since then Pakistan and India have fought two full-scale wars, in 1965 and 1971. The limited conflicts in the Himalayan mountains and Kashmir are ongoing. If nothing else, these wars illustrate the two countries' attitude to the use of force as an instrument to foreign policy; moreover, it proves that Kashmir will remain a flash point between Pakistan and India.

The evolution of deterrence strategies indicates a process of refinement of various concepts in accordance with particular geostrategic and geopolitical environments and the technological environment developments of the time. The acquisition of overt nuclear capabilities by Pakistan and India in 1998 has altered the paradigms of deterrence and peace in the subcontinent. The stage is now set for a nuclear security environment, which both India and Pakistan have to live with.[2] South Asia faces many challenges, including a backlog of mutual distrust, suspicion, and hatred. The two nuclearized states have fought three wars besides the recent one at Kargil (Kashmir) and are in the middle of a long-drawn-out low-intensity conflict, which may spin out of control and lead to a

nuclear catastrophe in South Asia.[3] The economic situation of both countries precludes the large-scale production of weapons and delivery systems.

Ashok Kapur, an Indian writer, argues in his book *Pakistan's Nuclear Development* that Pakistan's actions are a major example of the defiance of international laws on nonproliferation. He further states that major players in helping out Pakistan in becoming nuclear have been China, the USA, and the Muslim world by providing them military assistance from time to time.[4] Chris Smith, a professor in King's College, London, in his book *India's Ad hoc Arsenal* explained the motivation behind the Indian leaders triggering an arms race, including the nuclearization of the subcontinent. He stated,

> since 1947, and especially since 1962, India has maintained a strong defense sector. During the 1980s, after the decade of unprecedented regional stability following the 1971 war, defense procurement and expenditure began to rise steeply. In part this was in response to technical requirements once the economy and foreign exchange reserves began to increase. Yet the scale and rate of defense procurement was more than what nation required for modernization on one hand and defense on the other. Nor did there seem to be any great defense logic in what appeared to be continued nuclear weapon program. In late 1980s the defense modernization program fell victim to over-expansion and rising international indebtedness and the defense sector fell in chaos and array. However, the nuclear arsenal program continued. The quest for great power status, rather than national security, is uppermost in the minds of politicians in India and the decisions are taken in a haphazard and ad hoc manner.[5]

In late 1989, relations between Pakistan and India seriously deteriorated as violence erupted in Kashmir. India accused Pakistan of fomenting the new round of unrest, which continued to escalate during the first half of 1990, despite increasingly harsh efforts by New Delhi to suppress it. As tension grew, strident rhetoric by Indian and Pakistani leaders inflamed passion on both sides of the border, and there were mounting concerns that war might break out.[6] The visit of US Deputy National Security

Advisor Robert Gates and, possibly, nuclear deterrence prevented the war between the two countries. If India and Pakistan ever go to a full-scale war over Kashmir, it would be the first major military conflict in history between two states possessing nuclear weapons. Such a conflict would hold the gravest threat for the region and could have a profound impact on global affairs. By comparison, the hostilities between China and former Soviet Union in 1969 were limited to border skirmishes only. In case of hostilities, both sides would take their weapons out of the "basement" and make them ready for use. Even if the hostilities subsided, the fact that the nuclear arsenals were ready on both sides could change the complexion of the subcontinent forever. On the other hand if major hostilities break out, there is a good chance that nuclear deterrence would prevent both sides from going to a full-scale war.[7]

Professor George Quester, in his paper "Nuclear Pakistan and Nuclear India: Stable Deterrent or Proliferation Challenge," concludes that both states have nuclear bombs and these weapons present a serious threat to the world simply because of the destructive potential, even if their leaders have the best intentions. On the other hand, Indian and Pakistani leaders appear to have low levels of concern about each other's nuclear (not conventional military) developments. It is possible to be optimistic and conclude that the relationship is actually stable and, like the US-Soviet nuclear relationship of the cold war, helps prevent war on the subcontinent, or to be cynical and conclude that each regime cares more about the prestige of membership in the nuclear club than the ominous threat posed thereby against their populations.[8]

Since the late 1980s, all Indian prime ministers have had the option to conduct nuclear tests. However, each prime minister had decided against going through with field

tests. India's nuclear capability became known to all after it had detonated a nuclear device in what it called a "peaceful nuclear experiment" in May 1974. Why, then, all of a sudden, did India decide to conduct nuclear tests? The reasons suggested by India are a little of everything. In the beginning, Indian Prime Minister Vajpayee wrote to President Clinton about the "deteriorating security environment especially the nuclear environment, faced by India."[9] This was seen as an indirect support of Defense Minister George Fernandes's remarks about China being "potential threat number one." The Clinton administration dismissed these remarks, and the relevant letter was later published in *The New York Times*. Later Prime Minister Vajpayee changed his tune when he remarked that millions of Indians have viewed these tests as the beginning of the rise of strong and self-confident India. To a great extent, Vajpayee had voiced India's sense of honor and desired to be acknowledged as a great power in the world, when he talked about the rationale behind the Indian nuclear tests. However, what Vajpayee could hardly say in public was that his nationalistic party, "Bhartya Janata Party," (BJP) was a weak coalition government. Without a dramatic, patriotic event, like the nuclear test, it had little chance to stay in government.[10]

India's nuclear tests left Pakistan little choice. Pakistan considered that it had to restore the strategic balance and demonstrate the credibility of its own deterrent capability. Failing to do so would leave Pakistan politically, technologically, and even psychologically inferior to its archrival, something Pakistan can never afford. Pakistan's decision also stemmed from a frustration that it had warned the world several weeks before the Indian testing, but the international community had ignored its warning of the tests. Furthermore, the international response seemed to be more focused on persuading

Pakistan not to test, rather than punishing India for its tests. Pakistan waited for seventeen days for the world to respond, while increasingly feeling mounting domestic pressure to test and global pressure not to test, punctuated with Indian claims that the geostrategic balance had changed and that Pakistan should change its claim on Kashmir. Pakistan eventually pressed the button, however reluctantly, knowing that its nuclear response would mean sanctions similar to those applied to India.[11]

The nuclear tests conducted by India and Pakistan shook the region and challenged the near-global consensus on nonproliferation. Just a year after staking their claims to nuclear status, the two countries were embroiled in a bloody clash over Kashmir, coming close to their fourth major conflict since independence. Nowhere else in the world is there a confrontation between two nuclear powers as volatile as that in South Asia. The international community has been largely powerless in its response, and its warnings and proposals have had little impact. Now justified is the fear that nuclear weapons will be used to settle a territorial dispute two generations old. Strategic and territorial tensions have long bedeviled relations between India, Pakistan, and China. In the wake of the tests, the region's underlying problems have become still more intractable, while the need to resolve them has grown more urgent than ever. Attempts to deal with the consequences of the tests are inseparable from the history of nuclear developments in both India and Pakistan. The timing of India's tests was determined by the pronuclear stance of the BJP, which led the country's coalition government.

However, other factors to include political, scientific, and military pressure; the region's history of conflict; anxiety about China; quests for international prestige; and international arms control developments, were also important. Pakistan's decision to

follow India was informed by long-held concerns about its strategic vulnerability in any conflict with India, by pressures from its scientific community, by the need to forestall any Indian attempts at regional domination, and also for reasons of self-esteem.[12]

The 1999 confrontation in Kashmir cast doubt on claims that nuclear weapons would help to prevent war. If they led to complacency about regional stability, nuclear weapons could, in fact, encourage low-level conflict, with the attendant risks of escalation. Neither India nor Pakistan has revealed much about its nuclear intentions, about the nature and disposition of weapons, or how they are controlled and secured. There have been few signs of concrete steps to safeguard against accidents, unauthorized use, or faulty assessments on the other country's intentions. Far from furthering the two countries' apparent objectives, the tests have, in fact, set them back. International condemnation damaged India's status and image, undermining its attempts to secure permanent membership of the UN Security Council. Relations between India and Pakistan and between India and China worsened, and the economic costs were high, especially for Pakistan. Despite the domestic popularity of the tests, they did little to improve the position of India's BJP-led government, which fell within a year. Similarly, the Bhartya Janata Party's return to power in October 1999 owed little to the country's claim to nuclear status.[13]

In February 1999, Indian Prime Minister Vajpayee visited Pakistan on a goodwill visit, the first Indian prime minister to visit Pakistan in ten years. This was seen by the world as a major change by two nuclear states and was taken as a welcome gesture. Mansoor Ijaz, a journalist wrote in *The Los Angeles Times*, "In an era where summits are usually held more for their ceremony than the substantive negotiations, the promising

atmospherics of Lahore went well beyond vagaries and loosely worded commitments in the Lahore declaration. The development of trust and mutual self-interest between these two countries may just have laid the ground work for settling their most vexing bi-lateral issue, Kashmir."[14] During the summit, India agreed to place the Kashmir problem high on its agenda; however, it did not agree to talk immediately about it. Pakistan agreed to discuss other issues as well, whereas, before the Lahore summit, Pakistan had always required that the Kashmir problem be discussed first. Pakistan also agreed to end both official and unofficial support to Kashmiri *mujahideen* (freedom fighters).

In the summer of 1999, fresh violence broke out in Kashmir, which saw a bloody ten-week war. Pakistani soldiers and freedom fighters had cut off the lifeline of the Indian Army at the Siachin glacier (Himalayan region) and occupied strategic heights, ten to fifteen kilometers inside Indian-held Kashmir. Under the immense pressure of the US government, Pakistan's Prime Minister Nawaz Shareef decided to pull the troops back. This decision eventually led to his dismissal, and the military took over the government. The Lahore summit, which had taken a severe blow due to the clashes in Kashmir, received a further blow as the Indian government felt threatened by the military takeover in Pakistan. Whereas the Western governments saw the military government as a threat to peace in nuclear South Asia, most of the analysts and observers felt the other way around. Pamela Constable, a well-known journalist, wrote in *The Washington Post*, "The new military-led government in Pakistan is likely to pursue foreign policies that are acceptable and even pleasantly surprising to the Clinton administration. The new government is unlikely to pursue the aggressive policies towards India. The tense

security climate between the long-time rivals, both of which have nuclear weapons, may actually now improve under the military General."[15]

To date, Pakistan and India have fought three full-scale wars and were very close to a fourth in 1999. This could have been the first ever war between the two nuclear states. During the course of study, the chances of a full-scale war between the two countries are analyzed. However, the fact remains that Kashmir is a flash point between the two countries. David E. Bonior in his article "The Kashmir Flash Point," published in *The Washington Post*, wrote:

> When I returned from my visit to Kashmir last April, a friend of mine asked, "Isn't it where they make those sweaters." It was an innocent question, but it said volumes about America's indifference to that troubled region. To the visitor, Kashmir is awe inspiring, a world where towering peaks, lush valleys and pristine lakes host ancient Muslim, Hindu and Sikh cultures. But for it's 13 million people, Kashmir is also a land marred by bloodshed, terror and repression. Like Northern Ireland, Kashmir is a corner of the world where religious animosities have spiraled into violence. Since 1990, as many as 70,000 have died in a continuing cycle of violence, protest and repression. India, which continues to occupy Kashmir, now has 600,000 troops stationed there. The Kashmir crisis has put two nuclear powers, India and Pakistan on a collision course.[16]

The review of literature published so far reveals that much has been written about the root cause of hostilities between Pakistan and India. It has been debated at length that both Pakistan and India have put the security of South Asia at stake by declaring themselves nuclear at a time when the world has been debating nonproliferation treaties, like CTBT. The role of China as an important player in the region has also been debated in different books under review. However, what needs to be analyzed in this study is the technical and tactical capabilities of both countries, nuclear thresholds on both sides, the impact of nuclear capabilities on stabilizing already volatile South Asia, and the measures required to solve age-old issues between the two countries to make the world a safe place.

[1]Ziba Moshaver, *Nuclear Weapons Proliferation in the Indian Sub-Continent* (New York: St. Martin's Press, 1991), 19-20.

[2]Brig Muhammad Siddique, **"**Nuclear Strategy for Pakistan" (Paper, Pakistan Army, Rawalpindi, November 2001), 11.

[3]Praful Bidwai, "India-Pakistan hold reins to World's Nuclear Future," *The Daily Star*, 1 January 1999, 13.

[4]Ashok Kapur, *Pakistan's Nuclear Development* (United Kingdom: Oxford University Press, 1987), 1.

[5]Chris Smith, *India's Ad Hoc Arsenal: Direction or Drift in Defense Policy?* (New York**:** Stockholm International Peace Research Institute, Oxford University Press, 1994), 61.

[6]Leonard Spector, *Nuclear Ambitions: The Spread of Nuclear Weapons, 1989-90* (Colorado: Westview Press, 1990), 78-79.

[7]Ibid., 80.

[8]George Quester, *Nuclear Pakistan and Nuclear India: Stable Deterrent or Proliferation Challenge* (Strategic Studies Institute, US Army War College, Carlisle Barracks, PA, 1992), iii.

[9]Steve Myers, "Clinton to Impose Sanctions on India in Aftermath of Nuclear Tests," The *New York Times*, 13 May 1998, 9.

[10]Zhou Bo, "South Asia: The Prospect of Nuclear Disarmament After the 1998 Nuclear Tests in India and Pakistan" (Australia, Land Warfare Studies Center Working Paper No.108, November 1999), 7-8.

[11]Ibid., 10-11.

[12]Hilary Synnott, "The Causes and Consequences of South Asia's Nuclear Tests" (Paper, Oxford Unviersity Press for the International Institute for Strategic Studies, Oxford, 1999), 7-8.

[13]Ibid., 8-9.

[14]Mansoor Ijaz, "India-Pakistan Pact is Just a First Step: Perspective on South Asia," *The Los Angeles Times,* 1 March 1999, 5.

[15]Pamela Constable and Kamran Khan, "New Pakistan Regime Seen as Moderate," *The Washington Post,* 17 October 1999, A-21.

[16]David Bonior, “The Kashmir Flash Point,” *The Washington Post*, 31 July 2000, A-19.

CHAPTER 3

RESEARCH METHODOLOGY

Statement of the Problem

This research proposes to analyze the impact of the nuclearization of Pakistan and India on the military and diplomatic stability of South Asia in next five years or so.

Subproblems

The first subproblem is to analyze the impact of Indian political and military hard-liners and Pakistani military governments on the stability of the region after having overtly displayed their nuclear might. The second subproblem is to analyze the impact of China on the stability of the region, especially when it is growing into a global power.

Methodology Adopted

The research methodology adopted for this study is primarily descriptive in nature. The research conducted focused on:

1. Genesis of problem between Pakistan and India
2. The covert development of a nuclear arsenal by the two countries
3. The present stance of the Indian hard-liner government (Bhartya Janata Party) and Pakistani military government towards solving the issues between two countries
4. The role of outside powers, especially China, in stabilizing South Asia
5. Nuclear thresholds between Pakistan and India

Due to the absence of real wars or full-scale war between any two nuclear powers, the research is primarily done through available printed material. The cold war between

the USA and the former Soviet Union will be discussed as a model while discussing nuclear thresholds in chapter 4.

Additionally, as part of the research conducted, the author had exhaustive discussions with some faculty members from the Department of Joint and Multinational Operations and other departments, who have a keen interest in the subject. The discussions provided insights into the views of neutral observers not belonging to any of the teams in this ball game.

Data Needed

The data needed to answer the primary and secondary questions consisted of details on the problem areas between Pakistan and India since their inception as independent states. The covert nuclear development by both countries was spread over a span of several decades. The growing mistrust between the two states over a period of fifty years led to three full-scale wars without any significant gain on either side. What are the possible nuclear thresholds that can lead to a nuclear conflict in South Asia? What is the role of outside powers, especially China? What are the stances adopted by the current regimes in both countries towards each other which may lead to stability or vice versa? In addition, it was also important to study the demography of both countries, the behavior of the populace towards each other, and the infrastructure that exists in both countries. The command and control measures regarding the nuclear arsenal in both countries may also have an impact on any future employment of nuclear weapons, either planned or accidental. Data are also required for studying the nuclear doctrines of both countries to analyze the possible employment of nuclear weapons by both countries.

Lastly, the data collected help to analyze the latest developments within both countries in relation to changing alliances under the present circumstances.

Means of Collecting the Data

The data for the primary question and all subproblems came from a combination of the following areas: the US Army Combined Arms Research Library (primary source), interlibrary loans, on-line articles from different newspapers, and personal libraries of friends and contemporaries. In addition, some studies conducted by the Pakistani Army were also consulted. The discussions conducted with different faculty members on the subject were found to be very useful. An interesting viewpoint was established regarding a possible solution of the Kashmir issue while conducting a discussion on the subject with Indian officer attending CGSC.

Treatment and Analysis of Data

The data collected from all the above-mentioned sources were read in detail, and some interesting viewpoints were derived out of these readings. The first school of thought delineated that, "nuclearization of both countries will ultimately lead to nuclear war." The main exponents of this theory are writers, like Hilary Synnott, Ashok Kapur, and Leonard S. Spector. Hilary Synnott, in her Adelphi paper "Causes and Consequences of South Asia's Nuclear Tests," has expressed deep concern over the situation. She gives the example of the Kargil (Kashmir) war in 1999, when both countries came on the verge of a nuclear war. Ashok Kapur, basically an Indian writer, blames Pakistan for bringing instability to the region by going nuclear. Leonard S. Spector remains uncommitted; however, he does not believe that nuclear weapons can

deter Pakistan or India from fighting a war. In his book *Nuclear Ambitions: The Spread of Nuclear Weapons,* he describes the horrors a war between two nuclear states would produce.

The second school of thought that came out of the analysis of the data is that nuclear weapons have and will bring military stability in South Asia. George H. Quester, in his paper "Nuclear Pakistan and Nuclear India: Stable Deterrent or Proliferation Challenge," discusses the stakes both countries have in a nuclear war. He believes that the leadership on both sides knows that there is a striking similarity and relationship between the populace on both sides, thus they will never risk a mass murder of the civilian population on either side. He thinks that mutual assured destruction can work just as well for South Asia as it has worked for Central Europe (US-USSR), preventing war rather than making it more probable.

During the course of analyzing the data, some other issues, like the genesis of the problem, possible solutions to the Kashmir issue, and the role China and USA can play in solving issues between Pakistan and India, were also read in detail. In addition, an important aspect of disarmament of both countries in the future and their response towards nonproliferation treaties was also analyzed from the available data. Lieutenant Colonel Zhou Bo, in his paper "South Asia: The prospect of Nuclear Disarmament after the 1998 Nuclear Tests in India and Pakistan," has discussed some of these issues at length. Ziba Moshaver, in her book *Nuclear Weapons Proliferation in Indian Sub-Continen,t* discussed nonproliferation issues. As per her, the nonproliferation treaties have done little to discourage serious nuclear aspirants.

Thesis Research Time Frame

Chapter 3 discusses: (1) the research methodology, which is essentially dependent on available print material, (2) how and where the data were collected for the research, and (3) the analysis of the data. These are some interesting viewpoints to ponder in chapter 4, which will deal with the analysis of the study.

CHAPTER 4

ANALYSIS

Evolution of Nuclear Doctrine

Nuclear doctrine is unique because the principles of conventional doctrine are not entirely relevant to the use of nuclear weapons. It is also unique because unlike conventional doctrine, the evolution of which has been supported with experience, nuclear doctrine has been based entirely on theory. The main link was provided by the doctrine of strategic bombardment, which professed that the most effective use of aircraft was to attack social and industrial heart of the enemy, leading to internal collapse and destruction of will of the people. As nuclear arsenals grew and became more sophisticated, this capability reached such proportion that application of strategic bombing principles meant societal devastation. Consequently, deterrence from the employment of nuclear weapons became the primary purpose of their possession.

The initial period of the nuclear weapons age was marked by an absence of a viable strategy outlining the use of such weapons. The atomic bombs were seen as terror devices of the last resort. On 12 January 1954, Eisenhower's Secretary of State, John Foster Dulles, announced the "Strategy of Mass Retaliation." The stated objectives of this strategy were deterring aggression. Conventional forces were seen as a trip wire to warn the enemy, and thereafter nuclear weapons would come into play. This was the first stated nuclear doctrine and could, at best, be defined as crude. In 1962, the Kennedy administration gave out the "Strategy of Flexible Response." This strategy meant that the enemy threat would be met at different planes, and there would be a graduated response beginning with conventional warfare. In 1964, Robert McNamara announced a new

strategy by the name of "Strategy of Mutual Assured Destruction." Thus nuclear strategy started moving towards a punishment model of deterrence; however, it did not cater for what would happen if deterrence failed. In 1972, the Nixon administration came up with the "Strategy of Limited Options." The design of this strategy revolved around the need to have a range of options with which to respond to a nuclear attack. This strategy was based on an unrealistic assumption that nuclear conflict could be controlled to tolerable levels of damage. The Carter administration in 1980 came up with a new strategy by the name of "Countervailing Strategy." This strategy placed more emphasis on counterforce targets. The strategy was basically a refinement of the "Strategy of Flexible Response." In 1983, the Reagan administration took a more aggressive stance due to advances of the Soviet Union in South East Asia and declared "Prevailing Strategy." The strategy led to the famous "Star Wars" or "Strategic Defense Initiative."

Contemporary Nuclear Strategies

In order to analyze the nuclear strategies of India and Pakistan, it would be beneficial to first go through nuclear strategies of other nuclear-capable countries.

United States Nuclear Strategy. The United States has made a little headway out of the paradoxes of credible nuclear deterrence. Current US nuclear doctrine is an extension of cold war nuclear policies. In the post-cold war period, NATO's doctrine has also not been revised. Only the role of tactical nuclear weapons has been reduced and the targeting policy revised. The new trend is an unregulated transition to large-scale antiballistic missiles (ABMs), which would clearly militate against further reductions, create pressure to increase strategic offensive forces, and revise their doctrine of employment.[1]

Russian Nuclear Strategy. Soviet Premier Leonard Brezhnev in 1964 established strong nuclear forces along with strong conventional forces. Soviet doctrine during this period was "deterrence by denial." Mikhail Gorbachev developed new thinking, drawing substance from three basic elements: nuclear war cannot be won, security cannot be obtained through military means alone, and nuclear deterrence cannot serve as a durable guarantor for peace. In the present time, the authority over nuclear weapons in Russia has moved from the General Secretary of the Communist Party to the President. However, the military and intelligence hierarchies have greater control over the formulation of options and execution of nuclear policies.[2]

British Nuclear Strategy. Britain was the first country to base its national defense upon a declared policy of nuclear deterrence. Currently, nuclear forces continue to ensure stability and to prevent crisis escalation. Britain continues to maintain a credible and effective minimum nuclear deterrence based on the Trident submarine force. Due to the reliance on nuclear capability, Britain conducted a massive reduction of its conventional forces from 800,000 in 1956 to 191,000 in 1967.[3]

French Nuclear Strategy. President De Gaulle dismissed the NATO concept of integrated forces and produced a separate force, "Force de Frappe," to be equipped with atomic weapons. His doctrine is usually described as "Proportional Deterrence." After De Gaulle, "Flexible Response" has remained the nuclear strategy of France. Nuclear weapons have continued to play a major role in the French defense posture. President Mitterrand was of the opinion that nuclear deterrence was designed to avoid wars, which became the cornerstone of French strategic thinking and the basis for the French rejection of the "nuclear battles."[4]

Chinese Nuclear Strategy. Chinese nuclear forces, in combination with the Peoples Liberation Army's (PLA), conventional forces, served to deter nuclear and conventional attacks. China envisioned retaliation against strategic and tactical attacks and would probably attack countervalue rather than counterforce targets. The combination of China's few nuclear weapons and technological factors, such as range, accuracy, and response time, might further limit the effectiveness of strikes against counterforce targets. With the sophistication of military hardware and nuclear weapons development, China embarked on a gradual reduction of its conventional forces. In 1985 it was 3.9 million; in 1997 it was reduced to 2.8 million.[5]

Concept of Deterrence

Deterrence has been a characteristic feature of interstate relations throughout history. It has, however, gained importance in the post-World War II era due to the awesome destructiveness of nuclear weapons. "With the development of accurate delivery means, such weapons can not only be launched with ease on the adversary's armed forces, but can also be used to obliterate entire populations. Vulnerability of nations to nuclear devastation has forced them to prevent wars rather than fight them."[6] This has thus formed the basis of deterrence.

The object of deterrence is to prevent the enemy power from making the decision to use armed forces. The results desired are, therefore, psychological ones and are sought as a means of reducing the threat. If used to prevent the enemy from initiating action against oneself, it is "Defensive Deterrence." On the other hand, if used to prevent the enemy from resisting the action that one proposes to take, it is "Offensive Deterrence."[7]

The Essential Ingredients of Deterrence. In order to ensure that deterrence does not fail, it must have the following three ingredients:

Capability. The capability is related to possession of nuclear weapons, delivery means, and related technical details to carry out the threat.[8]

Credibility. Central to its working is credibility, which means the declared intent and believable resolve to protect a given interest. This requirement is more subjective in nature and is dependent on two subfactors, that is, second strike capability and political will.[9]

Communication. The third important requirement for an effective deterrent posture is that the potential aggressor has unequivocally communicated, the capability and will to carryout the deterrent threat.[10]

Relevance of Contemporary Strategies in the Pakistan-India Context

Earlier in the chapter various models were discussed that pertain to different countries' nuclear weapons' strategies. These may not be applicable in their present form when discussing Pakistan and India; however, certain important analyses can be derived from the existing strategies that will help in understanding nuclear strategies and intentions of both countries.

Strategy of Preemption. This option may not be feasible for either country. An assured 100 percent success of a first strike is not possible in the Pakistan-India context. Even if a couple of nuclear weapons were able to reach their targets in a retaliatory strike, the consequences would be devastating. Most analysts believe that it is a suicidal option for both countries.

Strategy of Massive Retaliation. This strategy again does not suit either of the countries as none--so far--possesses the wherewithal to retaliate in this manner. In any case it would be unwise for either country to initiate nuclear holocaust when vital national interests are not threatened.

Strategy of Flexible Response and Graduated Deterrence. In the Pakistan-India scenario, where reaction time is limited and the psychological impact of nuclear strike is so great, it would be unreasonable to expect the enemy to follow the escalatory ladder as per this strategy. Moreover, both countries do not have unlimited nuclear arsenals to employ nuclear weapons in stages.

Strategy of Mutual Assured Destruction. This strategy was the outcome of nuclear sufficiency and virtual parity between the US and USSR, the result of a costly arms race. A similar situation is not likely to occur in South Asia in the near future. The decision to target major urban and industrial centers is extremely difficult to make, not only due to moral considerations, but also due to the assured retaliation in kind from the other party. The limited number of warheads available with both parties precludes the adoption of this strategy.

Strategy of Limited Nuclear Options. This doctrine aims at engaging counterforce targets instead of countervalue targets. This is a war-fighting doctrine and may not be applicable in the Pakistan-India scenario, because a tactical nuclear strike could be responded with a massive nuclear retaliation.

Countervailing Strategy. This was a refined form of "strategy of limited options." It gave the US president more than one option for retaliation. Since this is also a war-fighting strategy, its adoption in the Pakistan-India scenario is not visualized.

Preventive Strategy. This is an aggressive form of nuclear warfare in which hostile missiles are prevented from reaching one's own soil. It is based on high-technological, space-based weapons, which are not available within Pakistan or India.

Minimum Deterrence. The aim of this strategy would be to deter and dissuade the enemy from embarking upon a large-scale conventional attack, nuclear blackmail threat, or actual use of nuclear weapons against each other. The minimum deterrent posture can be based upon a small but credible nuclear force that can surely inflict unacceptable damage to vital strategic targets of the enemy. This strategy presently is most suited for both Pakistan and India.

Geopolitical Environments

Global View. In the post-cold war era, it is likely that world will remain unipolar for quite some time with the United States as the global superpower. There is predominance of geoeconomics as against geopolitical imperatives. Emphasis on nuclear nonproliferation and prohibitive cost has replaced the conventional wars with low intensity conflicts. The United States' interests in South Asia revolve around nonproliferation, antiterrorism, fighting drug trafficking, and containment of China. "In her South Asia policies during post cold war era, the United States has shown clear tilt towards India. Although the international community knew that it was India that triggered the nuclear race, Pakistan could not be treated differently for legal and political reasons."[11] China's support to Pakistan may be affected due to pressures of nonproliferation regimes. Japan and the European Union, for varying reasons, will remain locked on nonproliferation. A softening stance of the European Union towards India is evident.

Subcontinent. Nuclear explosions by Pakistan and India have transformed the strategic scenario in the subcontinent. The implications are:

1. Both countries are presently involved in nuclear arms race and are likely to suffer economically.

2. Nuclear deterrence may prevent an all-out war, but may not deter both countries from pursuing respective state policies on mutual conflicts like Kashmir.

3. Due to political and economic coercion by major powers, both countries at some stage will have to sign the CTBT.

4. While continuing to develop nuclear weapons, both countries will invest in conventional capability for ensuring stability in nuclear deterrence.

5. Kashmir continues to be a flash point. The Kargil issue has exposed the fragility of Pakistan's and India's relations and reinforced the world's apprehensions about prospects of a nuclear conflict in the region.

> The analyses of Kargil crisis raises many questions. Firstly, can it be concluded that nuclear weapons in the Sub-Continent have not become a peace stabilizer, as some people wished? Secondly, did the nuclear weapons actually prevented Kargil war spreading into a full fledge war between the two countries? Answer to these questions would be interesting because many people argue that it was fear of Mutual Assured Destruction between the USA and former USSR which prevented war from actually taking place.[12]

Nuclearization of South Asia

The evolution of deterrence strategies indicates a process of refinement of various concepts in accordance with particular geostrategic and geopolitical environments and the technological developments of the time. The acquisition of overt nuclear capabilities of Pakistan and India in May 1998 has altered the paradigms of deterrence and peace in the

subcontinent. The stage is set for a nuclear security environment, which both Pakistan and India have to live with.

Historical Perspective. South Asia faces numerous challenges, including a backlog of mutual distrust, suspicion, and hatred. "The two nuclearized countries have fought three wars besides recent Kargil conflict and are in the middle of a long drawn out Low Intensity Conflict (LIC), which may spin out of control and lead to a nuclear catastrophe in South Asia."[13]

Economic Situation. The economic situation of both countries precludes the large-scale production of weapons and delivery systems. India is slightly better off than Pakistan, leading to asymmetry. This will greatly influence the formulation of deterrence theory.

Conventional Imbalance. India enjoys an advantage in conventional forces. It also has a technological lead and greater stockpiles in nuclear capabilities.

Geographical Proximity. Pakistan and India share a 3325-kilometer-long common border with critical targets lying in close proximity of each other.

> The Sub-Continent is one of the four sub-systems of Asia, and alone contains nearly one quarter of the world's population. The importance of Sub-Continent is also due to its geographical position, bordering on the Middle East in the west, and the South-Eastern system in the east. The Himalayas separate it from China to the north. It is in the close proximity to the Central Asia and Russia and has a long coastal line on the Indian Ocean. [14]

Launch-to-Target Time. Unlike earlier nuclear models, due to the geographical contiguity of Pakistan and India, launch-to-strike time is limited to a few minutes only. This is one of the most-destabilizing factors in the whole equation. "With almost no time to verify an adversary's launch, both sides would be tempted to eliminate the other's nuclear capability through a first strike, irrespective of declared policy of no first use by

India."[15] Conversely, elaborate and expensive command, control, communications, computers, and intelligence (C4I) systems would have to be developed to obtain timely warning of the adversary's hostile intentions.

China Factor. Despite India's continuous effort to drag China into the nuclear equation in South Asia, the geopolitical and geoeconomic realities will likely keep China out of the South Asian nuclear picture. Pakistan provides the counterweight in the India-China equation; therefore, an indirect shadow will always remain on India due to the China factor. "India's concerns about China's nuclear cooperation with Pakistan are understandable, however, the argument that China posed a real threat to India is not convincing. Chinese weaponry is not directed at India, and none of the disagreements between the two countries are causing significant problems. Status, rather than substance seems to be at stake."[16] India may, however, see deeper reasons for concern. China's economic, diplomatic, and military weight, plus its strategically important geographical position have all contributed to its international status. This status is out of India's reach for many years to come.

Indian Nuclear Doctrine. India released its draft nuclear doctrine on 17 August 1999, thus initiating a process of moving from "conceptualization" to "operationalization" of its nuclear capability. Key features of the doctrine, as published in all leading news papers in India, are as follows:[17]

1. India shall pursue a doctrine of credible minimum nuclear deterrence (actual size of force has, however, not been quantified).

2. India will have "no first-use" policy, but will respond with punitive retaliation should deterrence fail.

3. India will maintain sufficient, survivable, and operationally prepared nuclear forces, capable of shifting from peacetime deployment to a fully employable force in the shortest possible time.

4. A robust command and control system with effective intelligence and early-warning capabilities would be established, for which space-based and other assets shall be created. The authority for release of nuclear weapons will be vested in the person of prime minister of India or his designated successor(s).

5. Comprehensive planning and training for operations will be carried out in line with the strategy.

6. India will demonstrate the political will to employ nuclear weapons.

7. Highly effective conventional military capabilities will be maintained to raise the threshold of the outbreak of both conventional and nuclear war.

8. India will have effective, diverse, flexible, and responsive nuclear forces based on a triad of land-based missiles, aircraft, and sea-based assets.

9. Survivability will be ensured through redundancy, mobility, dispersion, and deception.

10. India shall not accept any restraints of its research and development capability and will continue to conduct subcritical nuclear tests, even if it decides to sign the CTBT at a future date.

11. India will not use nuclear weapons against nonnuclear weapon states, other than those which are aligned to nuclear states.

Pakistan's Nuclear Doctrine. Pakistan's nuclear doctrine came to light in March 1999 in speeches made by the foreign and defense ministers. The doctrine has certain declaratory and nondeclaratory parts for strategic reasons. The salient aspects are:

1. Policy is based on minimum credible nuclear deterrence, without getting into arms race.

2. No use against nonnuclear weapon states.

3. Option of "First Use" was retained to address conventional force imbalances.

4. Safeguards to prevent transfer of nuclear technology to other states.[18]

Analyses of Both Doctrines. The following is a comparative analysis of the nuclear doctrines of Pakistan and India:

1. Both are open-ended doctrines without any specified threat.

2. The Indian doctrine indicates maintaining highly effective conventional military forces to raise the thresholds of outbreak both of conventional military conflict as well as that of a threat or the use of nuclear weapons. This not only attempts at lowering Pakistan's nuclear thresholds, but also drags Pakistan into an arms race both conventional as well as nuclear.

3. India's "No First Use" option is aimed at gaining moral high ground internationally. Paradoxically, the doctrine has built-in options of punitive and preemptive strikes, which negate her no first use proclamations. On the other hand, Pakistan has retained the choice in order to create deterrence to offset imbalance of conventional forces.

4. India's command structure is a secret as is the system for the delegation of authority down the chain. Pakistan, on the other hand, has separately announced its chain

of command, which runs from chief executive or prime minister down to the strategic command, created for looking after nuclear assets of the country.

5. An announced doctrine lends credibility to India, as well as meeting the international demands of a formal doctrine, something Pakistan has reserved for security reasons.

Nuclear Strategies of Both Countries. Based on the analyses of nuclear doctrines of Pakistan and India, likely nuclear strategies may comprise the following:

Strategic Option. India's nuclear doctrine is based on effective credible minimum nuclear deterrence. India has professeda policy of "retaliation only," that is, it will not be the first to initiate but will follow, which means development of "second strike capability." On the other hand, Pakistan has kept the option of "first strike;" however, given the geographic depth of India, it is imperative for Pakistan to also develop a second strike capability.

Force Configuration. A nuclear force that is effective, enduring, diverse, flexible, and responsive to the requirements of the national leadership in accordance with the concept of credible minimum deterrence, and a potential second strike capability to increase the survivability factor of strategic nuclear forces will be followed by both countries.

Employment of Nuclear Forces. While India will maintain a superior conventional capability along the border, it has two major options to deploy its nuclear forces: (1) to keep the main bulk of the nuclear forces in forward posture (the geographical middle of the country) or (2) to keep the main forces in the rear posture

(depth). Pakistan lacks strategic depth, thus most of its nuclear assets during escalation would be either on mobile ground based launchers or on naval or air assets.

Targeting Policy. India will exploit Pakistan's geographic vulnerabilities and weak internal dynamics. As such, its targeting policy will take into account Pakistan's lack of strategic depth. The possible targeting policy options for India will be a suitable mix of metropolitan centers, countermilitary targets, destruction of airfields from where nuclear capable aircraft can operate, nuclear installations, war sustenance installations, and attack on naval bases. Pakistan would like to inflict unacceptable damage on India, which will dictate adopting the policy of countervalue targets rather than counterforce targets.

Research and Development. Both countries need to establish meaningful research and development organizations to cope with the pressures created by the dynamics of nuclear technology and to maintain and modernize its stockpile.

Command, Control, Communications, Computers and Intelligence (C4I) System. Generation and development of viable surveillance and C4I systems to cover an inimical force structure linked by real-time communications to provide suitable reaction time is a necessity for both countries, as the launch to target time is minimal.

Futuristic Nuclear Standing of Pakistan and India

Indian Nuclear Program. The Indian quest for nuclear power was driven more by her desire to be recognized as a world power in terms of prestige, than by her security concerns. "India finds itself at an advantage in most areas influencing the formulation of nuclear strategy; for example her conventional superiority, geographic depth, large

stockpiles of fissile material, satellite capability and a stronger economic base."[19] Salient conclusions from India's nuclear program are:

1. India's quest for thermonuclear weapons is a grave threat to regional security. Miniaturization of nuclear devices, indicative of a quest for tactical nuclear weapons, is an ominous development, because these are instruments for nuclear war fighting and not mere means of deterrence. Tactical nuclear weapons will give India the capability of wholesome deterrence.

2. Her nuclear weapons inventory and immense fissile material reserves give her a potential far into the future that Pakistan is keeping in sight while contemplating signing of nonproliferation treaties.

3. India's delivery systems presently consist of land-based missiles and nuclear-capable aircraft. India is pursuing an exhaustive missile development program. Her missile development and acquisition program portrays a larger design to influence the region particularly, the Indian Ocean area. Triad, a true delivery means would provide India with a viable second-strike capability against targets throughout Pakistan.

Pakistan's Nuclear Program. "Pakistan had put forward as many as six different proposals under President Zia that the US and other world powers should have welcomed, including having each South Asian state sign the nonproliferation treaties. All were declined by India, using various arguments."[20] Pakistan probably has no choice but to follow suit, as it is a much smaller country defending itself against a bigger and historically hostile neighbor. Salient conclusions from Pakistan's nuclear program are:

1. Pakistan has indigenously built a research nuclear power reactor that can produce plutonium. Pakistan will likely try to enhance its production capacity.

2. Pakistan's current delivery systems comprise of ground-based missiles and nuclear-capable aircraft, such as the US F-16 and French Mirage. Pakistan is indigenously producing a nuclear capable submarine, which will give a good boost to its second strike capability.

Nuclear Arms Race. Having demonstrated their nuclear capabilities, the two countries are now set to further develop nuclear weapons and capabilities to give credence to deterrence and their nuclear strategies. The following aspects need consideration in this regard:

1. "A fundamental lesson that we learn from US-Soviet equation is that the numbers game of warheads is neither necessary nor winnable."[21] Looking back at the nuclear junkyards, US and Russian strategists wonder if they needed all these weapons for creating the conditions for the MAD strategy. The important thing is to acquire a credible and survivable nuclear force, not an excessive, overkill capability. The arms race ultimately became one of the major causes of the Soviet Union's economic meltdown or disintegration. The USA also spent a staggering US $5.5 trillion on its nuclear forces between 1940 and 1996.[22]

2. India would endeavor to engage Pakistan in a crippling arms race in order to make it economically unviable. Subsequent to the May 1998 nuclear tests, India announced a 14 percent increase in its military spending and Pakistan 8 percent. "Taking a cue from the economic collapse of the erstwhile Soviet Union, India has cleverly confronted Pakistan to match its moves in the nuclear field, knowing fully well that Pakistan's economy is already tottering."[23] India can ride out the international sanctions

imposed as a result of the May 1998 nuclear tests, while Pakistan's economy suffered deeply.

3. In the estimation of the cost of nuclear tests and the buildup of nuclear arsenals, the figures are mind boggling. India spent $220 million over five years leading to the Pokhran test in 1974. General Sundarji (ex-Indian Army Chief) is cited to have estimated the cost of a minimum deterrence of 150 weapons based on missile systems (Prithvi and Agni--Indian missiles) as $10 to $12.5 billion.

4. India has stated in its nuclear doctrine that it would increase the size and potency of its conventional forces in order to raise the nuclear threshold. This indirectly means that Pakistan would be forced to increase its conventional forces to maintain a credible balance, otherwise, the nuclear threshold of Pakistan would be lowered, which is not desirable. Pakistan is being forced into a double arms race, conventional as well as nuclear, which it cannot afford and which it must avoid at all costs.

Nature of Future Conflict. The next war in the subcontinent will probably be fought under the nuclear environments with both countries having a declared nuclear capability. With the present correlation of strategic nuclear and conventional military capabilities, the war in the near future is unlikely to be decisive. The strategy of deterrence and limited warfare will prevail. The recent Kargil crisis reinforces this notion. However, limited war across the Line of Control (disputed border) in the short term and an all-out conventional war in the long term cannot be ruled out. The following pattern is visualized:

1. With India and Pakistan having demonstrated their nuclear capabilities, improvement of capabilities will continue to deter nuclear war in the short and long term.

2. The importance of a balanced conventional deterrence to provide stability to nuclear deterrence will remain paramount.

3. A future conventional conflict is likely to be limited in the dimensions of space as well as time, for fear of nuclear escalation; objectives are likely to be curtailed.

4. The propensity to engage in low intensity conflict will increase. India will seek to aggravate Pakistan's internal security situation with a view to creating internal instability. Pakistan would continue its support to Kashmiri freedom fighters.

5. Both countries will engage in a limited nuclear arms race including weaponization. However, the nuclear programs of both Pakistan and India will be tempered and constrained by nonproliferation regimes and pressures of sanctions by the major powers.

6. Pakistan's weak economy in the postnuclear environment will remain its inherent weakness. India, on the other hand, has a slight edge in this regard and may be able to sustain sanctions and still continue to improve her strategic capability.

Escalation Ladder. The foreseeable escalation ladder would vary for different scenarios; however, the general pattern would likely be:

Traditional Crisis. Hardening of position or stance include the following:

1. Deterioration of diplomatic relations

2. Harassing acts of violence

3. Transcending of low intensity conflicts into medium intensity conflicts

4. Violations across the Line of Control

Intense Crisis. Would include the following:

1. Completion of assembly of defensive and offensive formations

2. Initiation of acts of war

3. Commencement of hostilities, either restricted to Kashmir or across the international border elsewhere

4. Declaration of limited conventional war

5. Expansion of conventional war

6. Nuclear ultimatum

Nuclear War. Raising level of nuclear ultimatum and warning

1. Justifiable counterforce attack

2. Preparation for nuclear retaliation

3. All-out nuclear exchange

Compulsions for Both Countries. Certain factors, which will have a profound bearing on both countries in any future nuclear escalation, are:

Contiguity of Borders. "Unlike other nuclear weapon states, Pakistan and India have contiguous borders, which puts an inherent restriction on use of nuclear weapons due to fall out effects."[24] In the case of Pakistan, its major population centers are close to the international border, while in the case of India it is a mix of close and deep.

Deep-Rooted Hostilities. Since independence, the two countries have lived in an environment of persistent mistrust and hatred, which enhances the chances of escalation.

Delivery Means. Pakistan is wholly within the reach of existing delivery means available to India, while the converse is not true. This would make a preemptive strike a viable option for Pakistan unless Indian facilities are placed beyond strike range, while, on the other hand, it gives a certain degree of flexibility to India, which can think of second strike option.

Climatic Factor. The prevailing wind and precipitation pattern on and around the subcontinent will place severe restrictions on nuclear targeting policy and its time frame. The damage caused by thermal effects of nuclear explosions is also likely to be more severe because of the limited firefighting capabilities in both countries.

Early Warning. The superpowers enjoyed the luxury of early warning in the case of impending nuclear strike. This, in the case of Pakistan and India, will be too short, which poses problems for decision making for retaliation. "The short warning time makes situation between Pakistan and India more volatile. Leaders in both countries can order nuclear strike on slight suspicion of other getting ready for it."[25]

Thresholds and Acts Invoking Nuclear Response

The threshold is a perception about the cumulative effect of spatial losses, force degradation, economic devastation, and public morale. This would result from a sense of defeat in a conventional war. It also may be noted that a nation may grudgingly accept a defeat in a conflict over peripheral issues; it, however, will resolutely refuse to do so in matters of vital interests. Since determining nuclear thresholds is a matter of perception and is influenced by prevailing circumstances, it is extremely difficult to accurately outline the actual thresholds.

Defined thresholds should not be specific limits but a spectrum ranging from as low as possible to as high as tolerable. The lower limit should be credible because too low a declared threshold creates doubts about the credibility of the threat. The higher side of the spectrum ranges from territorial integrity and sovereignty of the country to other vital national security interests.

Pakistan's Nuclear Thresholds. Pakistan's lack of strategic depth and vulnerabilities of its core areas reduce its nuclear threshold vis-à-vis India. Major effects, which could hasten Pakistan's nuclear threshold, are:

1. When Pakistan's strategic lines of communication are severed
2. When economic and industrial strangulation of Pakistan is affected due to naval blockade and air action
3. When Pakistan's military potential is degraded to unacceptable limits
4. Whenever Pakistan faces a situation of internal collapse
5. Loss of sensitive or core areas and Pakistan's inability to retake those
6. Retaliation in response to Indian nuclear strikes

India's Nuclear Thresholds. India's vastness and remoteness of core areas raise its nuclear threshold. India may use nuclear weapons when:

1. Kashmir is likely to go away during conventional war
2. Loss of core areas
3. In response to Pakistan's nuclear strike
4. When India's military potential is degraded to an unacceptable limit

Nonproliferation Regimes and Response of Pakistan and India

The denial plan, McMohan law, Baruch Plan (1946), Gromyko proposals, and creation of IAEA (1957) laid the foundations of nuclear nonproliferation of weapons of mass destruction, all with the aim of preventing the spread of these weapons. "End of Cold War has added new dimensions to the problem with the creation of new supplier states, widespread production of high technology and difficulties in the monitoring of transfer of technologies."[26] The nonproliferation regimes work on consensus as the

treaties relate to national security, so there is no question of thrusting any agreement on any state, international arms twisting notwithstanding. It is important to analyze the essential nonproliferation treaties and discuss the aspects that Pakistan and India refuse to sign them. The thesis should also analyze how people in both countries think in favor of or against these treaties.

Comprehensive Test Ban Treaty (CTBT). The Comprehensive Test Ban Treaty prohibits any nuclear weapon test explosion or any other nuclear explosion anywhere in the world. Drafted at the Conference on Disarmament in Geneva, the treaty was adopted by the General Assembly on 10 September 1996. It was opened for signatures on 24 September 1996 at the United Nations Headquarters. As of now, 155 states have signed the CTBT, whereas only 56 states have ratified it so far.

Salient Features of CTBT. CTBT has the following salient features:

1. There is no bar on development, research, and production of nuclear weapons, but it bans nuclear explosions.

2. Verification is applicable at explosion sites and has no bearing on a country's nuclear reactors and weapon production facilities or even fissile stockpiles. Seismological data are essential to merit inspection of sites.

3. It allows cold testing and nuclear simulations.

4. CTBT will enter into force only after ratification by forty-four designated states which have nuclear weapons and nuclear power and research reactors. Forty-one states have signed CTBT, excluding India, Pakistan, and North Korea. Twenty-eight countries have ratified it, excluding USA, Russia, and China.

5. The treaty allows a withdrawal on six months notice on the grounds of an extraordinary event which a state regards as jeopardizing its security.

6. CTBT does not distinguish between nuclear weapon states and nonnuclear weapon states.

Arguments against Signing CTBT in Pakistan and India. Some arguments against signing CTBT in both countries are:

1. Performance of warhead designs could not be predicted with sufficient confidence if they were not test exploded. This applied especially to thermonuclear designs and warheads being miniaturized for delivery by missiles and guns.

2. By signing CTBT neither India nor Pakistan would be able to maintain credibility of its nuclear capability. CTBT will be the first step towards rolling back the nuclear capability.

3. Once both nations sign, they may not be able to pull back due to international pressure, even if India or Pakistan was to carry out further tests.

4. International aspects could demand inspecting nuclear facilities under the garb of suspected explosions in the vicinity of those installations.

5. Whoever signs CTBT later (Pakistan and India) would have better leverage to extract greater concessions. [27]

Arguments in Favor of Signing CTBT in Pakistan and India. People in favor (though fewer in number) argue that:

1. It does not imply denuclearization and does not bar a country from keeping its nuclear arsenal.

2. CTBT does not forbid research and development in the nuclear field, it only prohibits nuclear explosion tests.

3. It does not bar making further nuclear weapons or improving upon the existing ones.

4. The voluntary moratorium implies that Pakistan and or India has obtained tested designs or pertinent data.

5. Country has gained access to other techniques, like subcritical testing or computer simulation, for assessing performance of nuclear designs. [28]

Nonproliferation Treaty. It was signed in July 1968 and entered into force in March 1970. Excluding Pakistan and India, 187 countries signed the treaty. Salient aspects of NPT are:

1. Five countries, that is, China, France, Russia, UK, and USA which conducted nuclear tests before 1967, are given Nuclear Weapon State (NWS) status, known as N-5. These countries were allowed temporarily to maintain their nuclear status.

2. Other countries joined the NPT as Non Nuclear Weapon States (NNWS). These countries were never to develop or receive nuclear weapons, and in turn were promised: (1) commitment from NWS to nuclear disarmament; (2) access to the peaceful benefits of nuclear technology; (3) N-5 cannot transfer nuclear weapon grade technology to NNWS; and (4) amendment to the treaty can be made through majority vote, including N-5. [29]

Implications of NPT. The signing of NPT has the following implications for both countries:

1. The treaty does not accept, by its definition of NWS, Pakistan and India as NWS. Any country without this status, if it accedes to NPT, has to roll back its nuclear program. Moreover, will have to submit its facilities to an International Atomic Energy Agency (IAEA) inspection.

2. Roll back of nuclear program has far-reaching security and political implications for either of the two countries.

3. Both countries are under constant international pressure to sign NPT and could be deprived of much needed economic assistance.

Accession to Nuclear Weapon States. Although both Pakistan and India are de facto nuclear states, they have not been accepted as NWS. The implementation of NPT in its true sense is not possible any more. Therefore, the emphasis should shift to restraints rather than roll back. This requires an amendment in the NPT, which may not be possible under the prevailing international environment.

Fissile Material Cut Off Treaty (FMCT). In December 1993 the UN General Assembly passed a resolution calling for talks on a nondiscriminatory, multilateral, and internationally verifiable treaty, banning production of fissile material for nuclear weapons and other explosive devices. In August 1998 the Conference on Disarmament established an ad hoc committee for FMCT negotiations for a ban on the production of fissile material. Salient aspects of this treaty are:

1. It is a title or concept; not an agreement, as it has not yet been negotiated and enacted.

2. It aims at curtailing or stopping production of fissile material for military purposes and does not prohibit nuclear weapons production.

3. It aims to stop at the existing level of stocks of fissile material.[30]

Pakistan-India Response to FMCT. Initially both Pakistan and India refused to join negotiations for FMCT for individual reasons:

1. India maintained that no negotiations on FMCT could commence unless the five NWS promised to achieve total nuclear disarmament by a given date.

2. Pakistan refused on the grounds that it wanted a treaty that promoted both nuclear nonproliferation and nuclear disarmament, as otherwise the treaty would be discriminatory and, thus, ineffective.

3. After the nuclear explosions in May 1998, both Pakistan and India announced their willingness to join FMCT negotiations at the Conference on Disarmament.

4. Pakistan, however, insists that cutting off the future production of fissile material without taking into account the existing stockpiles will freeze nuclear imbalances and create security problems rather than solve them. Pakistan has maintained all along that FMCT must include a declaration by all states of weapons grade fissile material stocks and a schedule for the progressive transfer of these stocks to safeguards, so that unsafeguarded stocks are equalized at the lowest possible level.

5. India rejected the US suggestion that India immediately halt production of nuclear material. It, however, agreed to join negotiations for FMCT with an aim to forestalling Pakistan's plans for a reprocessing program. India also wants to create a significant imbalance between its fissile material stocks and that of Pakistan's.

Missile Technology Control Regime (MTCR). The G-7 countries, (USA, Canada, France, UK, Germany, Italy and Japan), established MTCR, and so far twenty-eight countries have pledged to abide by the treaty guidelines. In January 1993, MTCR

adopted revised guidelines to include missiles capable of delivering chemical and biological weapons. "The basic objective of the regime is to limit the spread of weapons of mass destruction (WMD) by controlling the delivery system especially missiles capable of delivering at least a 500 kg payload to a range of 300 KM. It is an informal non-treaty association of governments sharing common interests in the non-proliferation of missile development."[31]

Analyses on MTCR. The following must be kept in mind while evaluating MTCR:

Dual Use. Missile technology having dual use for space will have negative impact on the space program of the developing countries. This amounts to maintaining the dominance of P-5, (USA, UK, Russia, China and France), and denial of technology to the developing countries.

No Incentives. The lack of incentives in the shape of security guarantees, economic development, and technological assistance is the major impediment in persuading the developing countries to abandon their missile programs.

Monitoring System. In the absence of a monitoring system, the possibility of violations cannot be ruled out.

Discriminatory in Nature. The regime is discriminatory in its nature and scope by giving the right of development of missile technology to only a few countries. Its application has been selective.

Focus on Suppliers. MTCR mainly focuses on suppliers and does not provide any motivation to states seeking missile technology. Such an approach will spur an indigenous production program.

Indian Stance. India considers itself out of MTCR by claiming its missile program as indigenous.

Pakistan's Stance. Pakistan's security concerns are legitimate in the backdrop of an Indian missile development program. Pakistan is pursuing a policy to get South Asia declared as a missile free zone.

This chapter analyzed the contemporary nuclear strategies and their relation with the Pakistan-India scenario. The chapter went through nuclear doctrines of both countries, possible nuclear strategies in case employment of nuclear weapons is carried out,a possible escalation ladder, and nuclear thresholds and future plans of both countries. The chapter has also analyzed what some of the nuclear nonproliferation regimes are and what bearing do they have on both countries.

After having analyzed all possible aspects relating to the future of Pakistan and India, it may not be wrong to state that the nuclearization has brought in deterrence for both countries. However, given the age-old mistrust and Kashmir issue as bone of contention, one cannot completely rule out any possible future war. Such war will have a possibility of growing into nuclear conflict as well.

Keeping the above statement as an analysis of this research paper, the next chapter will recommend how a future war between the two countries can be avoided and how both countries can solve their disputes.

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[1]Arnold Kramish, *Four Decades of Living with the Genie: United States Nuclear Export Policy, Nuclear Exports and World Politics* (New York: St. Martin's Press, 1983), 26-27.

[2]Brig Muhammad Siddique, "Nuclear Strategy of Pakistan" (Study Paper, Pakistan Army, Rawalpindi, 2001), 17-18.

[3]Robert Boardman, *The Politics of Fading Dreams: Britain and the Nuclear Export Business, Nuclear Exports and World Politics* (New York: St. Martin's Press, 1983), 99-100.

[4]Pierre Lellouche, *Giscard's Legacy: French Nuclear Policy and Non-Proliferation,* Nuclear Exports and World Politics (New York: St. Martins Press, 1983), 40-41.

[5]Brig Muhammad Siddique, 19-20.

[6]Bernard Brodie, *The Absolute Weapon*, (New York: Oxford University Press, November 1946), 24.

[7]Brig Muhammad Siddique, 24.

[8]Ibid., 22.

[9]Ibid., 34.

[10]Ibid., 38.

[11]Zhou Bo, "South Asia: The Prospect of Nuclear Disarmament After the 1998 Nuclear Tests in India and Pakistan" (Australia, Working Paper No.108, Land Warfare Studies Center, November 1999), 4.

[12]Ibid., 13-14.

[13]Ibid., 18.

[14]Ziba Moshaver, *Nuclear Weapons Proliferation in the Indian Sub-Continent* (New York: St. Martin's Press, 1991), 4.

[15]Hilary Synott, *The Causes and Consequences of South Asia's Nuclear Tests* (New York: The International Institute for Strategic Studies, Oxford University Press, 1999), 34.

[16]Ibid., 49.

[17]Editorial, Salient Aspects of Indian Nuclear Doctrine, *"The Hindustan Times"* (New Delhi, India), 17 August 1999, 7-8.

[18]Editorial, Salient Aspects Are Taken From Various Issues, *"The Pakistan Times"* (Islamabad, Pakistan) March-April 1999, 12,13,17.

[19]Chris Smith, *India's Ad Hoc Arsenal--Direction or Drift in Defense Policy* (New York: Stockholm International Peace Research Institute, Oxford University Press, 1994), 181.

[20]George Quester, “Nuclear Pakistan and Nuclear India: Stable Deterrent or Proliferation Challenge” (Strategic Studies Institute, US Army War College, Carlisle Barracks, PA, 1992), 4.

[21]Ibid. 8.

[22]Ibid. 12.

[23]Zhou Bo, 10.

[24] Quester, “2.

[25]Ibid., 5.

[26]Leonard Spector, *Nuclear Ambitions: The Spread of Nuclear Weapons, 1989-1990* (Colorado: Westview Press,1990), 6.

[27]Arguments have been extracted from different newspapers of both countries.

[28]Ibid.

[29]Quester, 18, 19, 20

[30]Ibid.16-17.

[31]Brig Muhammad Siddique, 52.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

This study addressed the primary issue: whether or not nuclearization of Pakistan and India brought in military stability in South Asia, especially for next five years or so. The time frame of five years has been given because probably both countries are passing through one of the worst eras as far as their relations are concerned. India has a government which consists of religiously motivated hard-liners. A military government that is stable rules Pakistan, but historically the military has its grievances against India. This chapter addresses the core issue with the following conclusions and recommendations:

Conclusions

The analysis of the literature and present situation in the world in general and in India and Pakistan in particular has led to the following conclusions:

1. The overt display of nuclear capabilities by both Pakistan and India has been a result of Indian initiation, done at a time when the international community was pressuring both countries to sign the CTBT.

2. The nuclearization has definitely brought in some degree of deterrence against all out war between the two countries.

3. Not withstanding the deterrence value, both countries went to a limited war in Kargil (Kashmir), soon after the display of nuclear muscle; however, the conflict remained within the confines of limited war.

4. In the future, both countries can again start a conflict in Kashmir, which will have the potential to convert into a full-scale war, thus bringing South Asia on the verge of nuclear holocaust.

5. The escalation ladder of any possible nuclear war between the two countries will always start with an armed conflict in Kashmir.

6. As long as there is no permanent solution to the Kashmir problem, it is very difficult to predict that nuclearization will bring in total deterrence between the two countries.

7. Both Pakistan and India have genuine concerns about becoming active members in any of the "nonproliferation regimes," especially regarding signing of CTBT and NPT.

8. Both countries have their future plans as far as nuclear development is concerned; however, India is always setting a foot ahead in the arms race in South Asia, both in conventional and nuclear weapons.

9. Pakistan has kept the option of first use owing to the disparity in conventional forces, thus trying creating deterrence against any full-scale war.

Recommendations

Based on the analyses of the study and conclusions stated above, the following are the thesis recommendations on improving relations between the two countries to avoid any possible nuclear war in South Asia.

Confidence Building Measures (CBMs). The biggest problem between Pakistan and India is a lack of trust and confidence. The daily coverage of newspapers about killings in Kashmir in both Pakistani and Indian papers speaks of deep-rooted historical

and religious animosity between the two countries. Over the years Pakistan has made numerous proposals regarding the nuclear issue, including the making of a regional nuclear-weapon-free-zone and zero missile regime in South Asia. Somehow, India has turned down all these CBMs on one pretext or the other, mainly showing that it is concerned about the threat from China and that nuclear disarmament should be the global issue not a regional one. India has always tried to project itself as a power at a global level, thus not letting in any fresh air in its relations with its immediate neighbor, Pakistan. At a minimum, the following is required to be done as credible CBMs:

1. Over the years, Pakistan has stressed that the main precondition for a comprehensive restoration of relations between India and Pakistan is the solution of Kashmir problem in the first place. India has claimed that the Kashmir issue could only be resolved along with other issues, and that negotiations on Kashmir cannot include any discussion about "sovereignty of India." Such an attitude from both sides is detrimental to any future negotiations. Both sides will have to start negotiations without any preconditions in order to sit at the table. Unfortunately, the South Asian Association for Regional Cooperation is one of the most impotent organizations in the world, mainly because two major members are Pakistan and India and they have their own problems. The South Asian Association for Regional Cooperation should play a more dynamic role, and that is only possible if India, in particular, were to adopt a more flexible approach.

2. The second important step is for Pakistan to renounce the use of force and support of freedom fighters and India to accept Kashmir as a disputed area. This may be more difficult for India, as it has long wanted to make the Line of Control an international border. India's attitude remains typically that of a major power in a standoff

with a smaller power. It anticipates international support in its favor whenever there is an armed conflict. Unfortunately, the role of international media during the Kargil war superimposed their notion. Pakistan, on the other hand, was astonished about international hypocrisy on not talking about the unresolved UN resolution on Kashmir. For a genuine peace in Kashmir and South Asia, India will have to take a benign attitude towards Pakistan and not get into a "reaction centered" relationship with Islamabad, as suggested by ex-Prime Minister I. K. Gujral.

3. It goes without saying that any solution of problems between India and Pakistan can only be negotiated between them. However, such negotiations have not worked in the past. History suggests that mediation from friendly countries might be useful. If a referendum under UN auspices can be held in Cambodia and East Timor, why can the same not happen in Kashmir? With the consent of both countries, a broader security dialogue involving interested parties may be a worthwhile option.

4. On the basis of admitting that the Line of Control is still disputed, the two sides can be separated from each other along the line and withdraw from forward positions to the close proximity. If such a separation is considered difficult for some reason, then a more active role by UN observers and or force should be allowed to maintain a standoff between the two countries until some solution to the problem is worked out.

5. Since Pakistan and India cannot realistically roll back their nuclear programs, an effective command, control, and surveillance system of their nuclear weapons is all the more important. This will by no means be an easy thing for two new nuclear states. Given the fact that the geographic proximity of major civilian and military targets across

the border leaves both countries no warning time, the idea of first strike in a crisis may look appealing, which can only be avoided with the state-of-the-art command, control, and surveillance system.

6. The top priority for arms control in South Asia remains that both Pakistan and India sign the CTBT. Strong domestic opposition made a national consensus in either country a difficult choice. The rejection of ratification of the treaty by the US Senate made it more difficult for any governments in Pakistan and India to convince their populace on signing CTBT. A common feeling in both countries is that the US has lost its legal and moral authority to persuade Pakistan and India to sign the CTBT. However, once again India, being the bigger country, will have to take the first step; it is likely that Pakistan will automatically follow suit. The FMCT is a next step in line. Neither India nor Pakistan supports invoking a moratorium on the production of fissile material before a treaty has been negotiated and agreed. This raises the question of how much fissile material India and Pakistan need to produce nuclear weapons. Pakistan's quantity is directly linked with India. India, on the other hand, has global aspirations. They want to match Pakistan and China at one time, while their hard-liners want the government to build ICBMs to have a capability like that of N-5, in order to be able to hit any country in the world if the need arises. In the foreseeable future, both countries are likely to increase their production of fissile material. How much will be determined by the security environment, technical capabilities, and economic performance of two countries.

Summary

To summarize, this study has supported the fact that there cannot be everlasting peace in South Asia without a permanent solution to the Kashmir problem. The reigns of

the Kashmir solution are essentially in the hands of the international community in general, and P-5 in particular. It depends upon how much pressure the international community can bring onto the Indian government to earnestly sit on tables in order to discuss the Kashmir issue with Pakistan. If it is not done, the arms race of both conventional and nuclear weapons will continue between the two countries for years to come and some day the world might repent on not having taken due interest in solving the Kashmir issue. Taking a cue from the Cold War between the USA and the former USSR, both India and Pakistan need to learn the possible disasters of nuclear arms race.

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